## PATENT ABSTRACTS OF JAPAN

(54) ABNORMALITY DIAGNOSTIC DEVICE

(57) Abstract:

PURPOSE: To provide an abnormality diagnostic device which can easily and accurately decide the abnormality of a plant based on the signal waveform without using any operator to decide the abnormality.

CONSTITUTION: A sensor 1 is provided on a plant to be diagnosed, and the process signal which is outputted from the sensor 1 to show the operating state of the plant is transmitted to a neural, network 2. A signal pattern of the abnormality mode is previously learnt and stored in the network 2. Thus the network 2 compares the pattern of the process signal received from the sensor 1 with the signal pattern of the abnormality mode stored previously when the plant is actually operated. Then the network 2 decides the plant abnormality based on the result of comparison and shows this fault on a display device 3.